



MARCH 2004

Finger and Hand Safety



In FY-03 at NAS Oceana, there were 51 mishaps relating to fingers and hands. There were more injuries to fingers than to any other body part. Of these, we see high rates related to on-the-job injuries working on equipment and using tools. More injuries occurred on-duty than off-duty. Another high incident category was doors- closing doors on hands and fingers and cuts to hands or fingers- both personnel doors and car doors.

Another high-risk category we easily overlook is sports related injuries to fingers and hands.

Your hand is one of the most complex parts of your body. Its intricate structure is a finely tuned movement of nerves, tendons, tissues and bones working together as a unit. These parts coordinate your grip, and let you perform a variety of jobs. In fact, with healthy hands you can do such routine jobs as buttoning a shirt, opening a door and lifting a fork.

On the job, your hands are the tools that make you a highly skilled and valued worker. Yet, as important as your hands are, most people are careless about **hand safety**. In fact, about 180,000 people suffer serious hand injuries each year--many the result of job-related accidents.

Reasons For Hand Injuries. Sometimes faulty equipment, broken tools or a dangerous work environment may be hazardous, but **the most common cause** of hand injury is human error due to:

- Boredom with a routine job.
- Inattentiveness to details and safety procedures
- Distractions in the workplace.

Remember: Minor injuries are a warning that you are not paying close attention to your work.



Hand Hazards. The first step in preventing hand injuries is to know the dangers involved in your job and how to avoid them. Hazards include:

- **Pinch Points.** Danger zones are found between a moving object and stationary object, or between two continuous moving objects. Avoid placing your hand in these danger zones.
- **Hot Spots.** Certain types of machinery, like printing presses and air compressors, have built-in heaters or generate heat. Hot areas on these machines can cause serious burns. Protective gloves can protect your hands from hot machinery.
- **Rotating Machine Surfaces.** Rotating devices such as drill bits, saw blades and milling cutters can be extremely hazardous to hands.
- **Automated Machinery.** Be alert when working around automated machinery. Relays, delay timers, remote controllers and robotics can cause machinery to start up suddenly even when it appears to be turned off.

- ***Jewelry and Loose Clothing.*** Jewelry and shirt sleeves can easily get caught in moving machinery. Always remove all jewelry before beginning to work and make sure shirt sleeves are rolled up above the elbow.
- ***Other Hand Hazards.*** Keep your hands out of the space between a door jamb and a rolling cart. Watch your hands around forklift operations. Wear gloves while moving heavy objects, and be aware that losing control of something heavy can cause smashed hands.



Hand Tools. Using the wrong tool for a job, or using the right tool in the wrong way can result in a serious hand injury. Inspect your tools carefully before using them and throw away any tool that appears unsafe. Also, never apply unnecessary pressure when using tools.

- ***Wrenches.*** Whenever possible, use a box-end wrench instead of an open-end wrench to avoid slipping. Choose the proper size wrench for the job. Always pull on the wrench. Never push against it.
- ***Screwdrivers.*** Put the object you're working on in a vise or on a flat surface. Never hold it in your hand.
- ***Knives.*** Keep blades well sharpened. Always cut away from your body. Use a retractable knife blade when possible. Never use a knife as a screwdriver. Make sure you have plenty of space around you when working with a knife. Never work on the same piece of material with a co-worker who is using a knife. Knives should never be stored in drawers. Store knives separately from other tools, and keep the blades turned down. Never leave a knife lying around. When carrying a sheath knife on your belt make sure the sheath is over your hip with the knife blade facing back.

Wear the proper rubber or polymer gloves when working around chemicals such as cleaning fluids, acids or solvents. If your hand accidentally comes in contact with a hazardous chemical, rinse the area well with cool water and seek medical attention immediately.



Medical Treatment for Hand Injuries. Professional medical personnel should treat all injuries, no matter how minor. But, if a co-worker is injured there are several important first-aid procedures you need to perform while waiting for help to arrive.

- ***Cuts and Wounds.*** Apply direct pressure with a clean cloth.
- ***Burns.*** Run cool water over burn areas immediately to ease pain and reduce the severity of the injury.
- ***Amputations.*** An amputated hand or finger is probably the most severe hand injury you or a coworker will ever face. Immediately apply pressure to the injured area. Take the patient to a quiet place where he or she can lie down while you arrange for an ambulance. Wrap the amputated part in a clean sponge and place it in a plastic bag. Place the bag with the amputated part on ice or in ice water. **DO NOT** let the amputated part come in direct contact with the ice. *Remember,* For all injuries, from the most minor to the most severe, *get first aid immediately* and always seek appropriate medical attention.

For more detailed information on this important issue, please visit our website at <http://www.nasocena.navy.mil/safety/Training/Lesson%20Plans/LessonPlans.htm> and read the Hand Safety Lesson Plan.

Prevention of Sports Injuries- Basketball



Diana Settles, MAT, ATC
Manager, Injury Prevention Physical Fitness Programs
Navy Environmental Health Center, Norfolk, VA

PERSONAL FITNESS:

- Pace yourself; don't do too much too soon when pre-conditioning for basketball season.
- A conditioning program with emphasis on aerobic and muscular fitness training should be implemented prior to the beginning of basketball season.
- Begin a continued maintenance program throughout the season would also help prevent injuries.
- Contact a local MWR Trainer for additional information on basketball conditioning. Many MWR Facilities provide safety/injury prevention information to coaches, players, and officials regarding preparation, conditioning, and training proper playing techniques.

NOTE: Prior injury to the body predisposes one to re-injury of that particular extremity.

EQUIPMENT:

- Jewelry, i.e., rings, necklaces, etc. are not recommended during basketball activity participation.
- Clothing attire that contain pockets are not recommended due to the risk of fingers getting caught/lodged in clothing.
- Protective eye goggles would help prevent ocular injury.
- Basketball playing shoes should be used. Shoes specific to other sports are not recommended.
- Basketball goal must be padded; allow space of at least 8-ft. clear area past goal. Ensure bumper guards are installed correctly on glass boards.



TRAINING / TECHNIQUE:

- The style of play by a basketball team may increase risk of injury; the more contact involved, the higher the incidence for injury.
- Trained coaching staff can impact positively upon basketball injury prevention. Coaches should be able to provide safe information to players on the team regarding preparation, conditioning, and training proper playing techniques.
- Officiated games decrease the risk of injury occurrence. Enforcement of rules assists in decreasing the incidence of

injury.

ENVIRONMENT:

- Be aware of the environment around you. Prior to participating in basketball, look for predisposing risk factors on the playing court such as foreign objects, towels, gym bags, water, etc.
- Alcohol consumption should be discouraged during



National Nutrition Month

National Nutrition Month® is an annual event sponsored by the American Dietetic Association (www.eatright.org) and is endorsed by the DoD Nutrition Committee to support a healthy lifestyle and improve mission readiness. The theme for March 2004, **"Eat Smart, Stay Healthy"**, reinforces the importance of nutrition and physical activity as key components in an individual's health today and in the future. A healthy lifestyle is the key to feeling great and peak performance. This year's slogan communicates that a healthy lifestyle starts with healthy eating. It is a call to action that challenges Americans to take responsibility for their nutrition and physical activity choices. Key messages in the current campaign include personalizing food choices that include variety, making moderation a goal, and developing a fitness plan. The articles below are provided as starters to help you set your goals.

The Most Important Meal of the Day

by the American Institute for Cancer Research



Remember the saying, "Breakfast is the most important meal of the day?" It's true. In fact, breakfast may help control Americans' increasing problem with overweight and obesity. A number of studies show that people who successfully maintain a significant weight loss eat breakfast just about every day. What you choose to eat for breakfast makes a big difference for your health. A variety of fruits can bring you near the minimum number of five daily fruit and vegetable servings recommended for lower cancer risk. Or once in a while try a medley of vegetables in an omelet.

Mishaps in February

1. Puncture wound to index finger while moving equipment- human error- 3 workdays lost.
2. Tripped on a cable and sprained back- human error- 1 workday lost.
3. Chipped bone in ankle playing basketball- 2 workdays lost.



REGIONAL SAFETY OFFICE

1750 Tomcat Blvd. Suite 2170

Virginia Beach VA 23460-2122

Oceana Bldg 230 • Dam Neck Annex Bldg 585

OC- (757) 433-2692 • fax (757) 433-2694 • DSN 433

DN- (757) 492-6630 • fax (757) 492-7411 • DSN 492

safety@nasoceana.navy.mil